

Culling causes and lifetime performance of Holstein-Friesian cows

S u m m a r y

Experimental material consisted of culled Holstein-Friesian cows. Using source data contained in breeding records the following parameters were calculated: culling index in individual years of observations, intensity of culling including the causes, and lifetime performance of cows in the investigated years and in terms of culling causes. For the purpose of a more detailed analysis of the investigated material for each cow, apart from lifetime performance, its yield was calculated per day of life, day of performance and day of milking. Moreover, the length of life and the length of productive life were also analyzed in the study. The culling index for cows in the investigated period was 17.24%. A decrease was found in this index in successive years of the study from 20.53% (2001) to 15.75% (2003). The most frequent cause of culling cows were casualties (42.47%) and infertility (34.25%), while least frequently (5.94%) animals were eliminated from the herd due to sale for further rearing. The highest percentage among cows eliminated from the herd accounted for animals removed from the herd in the first (26.04%), the second (24.66%) and the third (20.09%) lactation. Mean length of life, productive life and the number of milking days for culled cows were 5.12 and 2.75 years and 742 days, respectively. Among culled animals in successive years of the study an increase was shown in the lifespan, length of productive life and the number of milking days. While analyzing lifetime performance of the population of Holstein-Friesian cattle in successive years, an increase was found in the yields expressed in kg milk, butterfat and protein, as well as in productivity in terms of day of milking and day of life. While comparing the length of life, productive life, milking days and lifetime performance of cows taking into consideration culling causes it was shown that animals culled due to sterility lived longest (2002 days) and had longest productive lives (1131 days). On the other hand, the highest number of milking days (795) and the highest lifetime performance (21 064 kg milk, 804 kg butterfat and 685 kg protein) was shown for cows culled due to udder diseases.